

REMARKS

Claims 1 through 20 are pending in this application. Claims 1, 3, 9 and 11 are amended in several particulars for purposes of clarity in accordance with current Office policy, to assist the examiner and to expedite compact prosecution of this application. The Applicant appreciates the Examiner's indication of allowance concerning claims 17 through 20 and the allowability of claims 3 and 11.

In paper number 1103 on the continuation sheet, with respect to claims 1, 2, 4-10 and 12-16, the Examiner stated that the "Applicant's prior art" figure 1 discloses a ground portion formed around the liquid crystal display and, in view of Hansell, Figs. 1-3 clearly a reinforcement connector 8 (or the spring finger) connected to a ground pin connector 17 of the header 20 of the PCB 21 and a connection cable 10 of an external system, accordingly, the reinforcement connector supports the ground of said printed circuit board.

However, as discussed in the following, claims 1, 2, 4-10 and 12-16 are also allowable.

Claims 1 and 9 were amended for the purposes of clarity concerning the reinforcement connector and the amendment is supported by the drawings and the specification.

I. REJECTION OF CLAIMS (35 U.S.C. § 103)

Claims 1, 2, 4-10 and 12-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (Fig. 1) in view of Hansell, III et al. (USPN 5,176,538). The Applicant

respectfully traverses.

MPEP 706.02(j), establishes a *prima facie* case of obviousness under 35 U.S.C. §103 and as discussed below, the Examiner has failed to prove a *prima facie* case of obviousness.

A. Concerning claim 1, Hansell and the combination of references fail to teach or suggest *the reinforcement connector connected to and formed with said ground portion and supporting the ground of said printed circuit board where the printed circuit board provided with a connector to an external system by a connection cable and a ground portion formed around said liquid crystal display controller* and concerning claim 9, Hansell and the combination of references fail to teach or suggest *a reinforcement connector provided on said printed circuit board, connected to said ground portion and supporting the ground of said printed circuit board.*

Hansell concerns the connection cable structure and not the connector on the printed circuit board. In col. 1, lines 48-51, Hansell states “The present invention relates to a cable connector having a shield with integral spring fingers...” which the Examiner equates to the reinforcement connector. In column 3, lines 61-66, “...Fig.2..the ground spring finger 8 is shown engaged with the ground pin 17..The signal 19 and ground 17 pins are a part of the header 20 that extends from the printed circuit board 21.” Therefore, the spring finger 8, which the Examiner corresponds to the reinforcement connector of the present invention, is not part of printed circuit board 21 but part of the connection cable.

On the other hand, in the present invention the reinforcement connector is on the printed

circuit board as mentioned in claim 9 and formed with the ground portion which is formed around said LCD controller as mentioned in claim 1.

Therefore, if figure 1 of the present application is combined with Hansell, Hansell teaches of the spring finger 8 on the module of the connection cable and not with the ground portion and the printed circuit board of the LCD having the LCD controller.

Moreover, Hansell teaches away from the present invention since the present invention has the reinforcement connector connected and formed with the ground portion around the LCD controller and being provided on the printed circuit board instead of being on the connection cable connector module of Hansell.

Furthermore, the distinct element of the *reinforcement connector* from a *connector* connected to an external system by a *connection cable* is not taught or suggested by Hansell (or the combination) because the spring ground fingers 8 are within the connector for the connection cable as seen in figure 2 of Hansell. The one to one ratio of the signal to ground lines also further shows this in figure 2 of Hansell.

B. Concerning claims 6 and 14, the combination of references fail to teach or suggest *said reinforcement connector being on opposite sides of said connector* .

Figure 1 in the present application does not teach or suggest a reinforcement connector. Therefore, looking at Hansell, the spring finger 8 (correlated to the reinforcement connector by the Examiner) is not on the connector and not on opposite sides of the connector, where the connector

is provided on the printed circuit board. On the other hand, Hansell has a spring finger on the connector of connection cable 1 as seen in figure 1 of Hansell.

The present invention, as seen in claims 6 and 14 (second reinforcement connector being on opposite sides of said connector *coupling with said connection cable*), as well as Hansell, as seen in figures 2, 3 and 13, the connection cable is separate from the connector on the printed circuit board. Hansell has the spring finger on the connection cable while the present invention has the reinforcement connector on the printed circuit board which then provides more appropriately a support for the ground of the printed circuit board as claimed.

Therefore, it is clear that in the present invention, the reinforcement connectors are not on the connection cables as seen in the combination of Hansell and figure 1.

C. Concerning claims 6 and 14, the present invention has the connector that receives data signals from the external system to the printed circuit board while the reinforcement connector, which is separate from the connector, supports the ground of the printed circuit board.

However, as seen in column 1, lines 20-28 of the reference, Hansell, the purpose of Hansell, is to prevent the cross-talk from being increased and the signal density from being reduced by providing an interconnector module. The FIGS. 2, 5, 7, 9, and 10 of Hansell, show the interconnector accommodating both the ground and signal contacts to accomplish the purpose.

However, the reinforcement connector of the present invention support the ground of the printed circuit board and the connector has the data signals from the printed circuit board. Hansell

does not have such separate structures but has the spring finger included in the connection cable module 1.

D. The Examiner fails to show a proper motivation to combine the references.

The Examiner stated that the reason to combine or modify the references was because in this case, USPN 5,176,538 of Hansell is employed for teaching a reinforcement connector having a ground spring finger for engaging a ground portion of a printed circuit board so as to provide the ground to said PCB with reliability and stability.

The first point in MPEP 706.02(j) states that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. According to *Graham v. John Deere Co.*, “When patentability turns on the question of obviousness, the search for and the analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness,” and *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, “a showing of a suggestion, teaching, or motivation to combine the prior art references is an ‘essential component of an obviousness holding.’” “Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999). The showing must be “clear and particular” without broad generalized conclusory statements. *Id.* There must be specific statements showing the scope of the suggestion, teaching, or motivation to combine the prior

art references. *Id.* at 1000. There must be an explanation to what specific understanding or technical principle would have suggested the combination of references. *Id.*

Here, however, the Examiner reason for modification or combination is basically “reliability and stability”. Respectfully, “reliability and stability” is however, not clear and particular but is a generalized conclusory statement that is prohibited by the *Dembiczak* court.

II. ALLOWABLE SUBJECT MATTER

The examiner stated in paper number 1103 that claims 3 and 11 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Following the advice of the examiner, claims 3 and 11 were rewritten in independent form including all of the limitation of the base claim and any intervening claims. Therefore, claims 3 through 11 should be allowed.

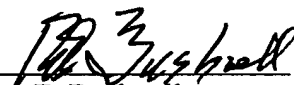
III. ENTRY OF THE AMENDMENTS

Entry of the foregoing amendments to claims 1, 3, 9 and 11 is proper under 37 C.F.R. 1.116(b) because those amendments simply respond to the issues raised in the final rejection, no new issues are raised, no further search is required, and the foregoing amendments are believed to remove the basis of the outstanding rejections and to place all claims in condition for allowance. The foregoing amendments, and explanations, could not have been made earlier because they are merely responsive to issues newly raised in Paper No. 1103 and Paper No. 5.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

A fee of \$172.00 is incurred by the addition of two (2) independent claims in excess of three (3). A fee of \$420.00 is incurred by filing of a petition for two-month extension of time. Applicant's check drawn to the order of the Commissioner accompanies this Amendment. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,


Robert E. Bushnell
Attorney for the Applicant
Registration No.: 27,774

1522 "K" Street N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56366
Date: 3 March 2004
I.D.: REB/SS